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**Shimura et al.**

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(54) **BRAKING DEVICE**

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See application file for complete search history.

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(57) **ABSTRACT**

A braking device capable of generating a larger braking force is provided. The present invention provides a braking device including a housing (10) having a peripheral wall (11), a coil holding unit (20) provided inside the housing (10), a coil (30) held by the coil holding unit (20), a first activation chamber (40) formed between an inner peripheral surface of the peripheral wall (11) of the housing (10) and an outer peripheral surface of the coil holding unit (20) arranged in parallel with the inner peripheral surface, a rotor (60) provided inside of the first activation chamber (40), and a magnetorheological fluid (80) filling an inside of the first activation chamber (40), wherein the inner peripheral surface of the peripheral wall (11) of the housing (10) is at a position farthest from the center of rotation of the rotor (60) in a radial direction in the inside of the housing (10), wherein the rotor (60) is in a cylindrical shape including an outer peripheral surface having a gap between the outer peripheral surface of the rotor (60) and the inner peripheral surface of the peripheral wall (11) of the housing (10) and an inner peripheral surface having a gap between the inner peripheral surface of the rotor (60) and the outer peripheral surface of the coil holding unit (20), and wherein a shearing stress of the magnetorheological fluid (80) acts on the inner peripheral surface and the outer peripheral surface of the rotor (60).

**2 Claims, 1 Drawing Sheet**

